



# SATERN

System for Administration, Training, and Educational Resources for NASA

## Online Content Overview

## Classroom Guide

(Version 5.8 SP5)

April 2010





For SATERN v 5.8 SP5

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**From the NASA SATERN Program Office:**

All SATERN administrator training materials must be used alongside the SATERN Rules and Process Guide for administrators. The Guide identifies areas where SATERN functionality cannot enforce the Agency-defined usage of the system at NASA and provide guidance to enable administrator compliance with Agency-defined methods and procedures.

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# Scenario for Online Content Labs

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As a SATERN administrator, you have been asked to create two online items.

The first item should take learners to the *Effective Business Meetings Simulation* (AICCMODULE1316) online content. This content object has already been created in the system and communicates with SATERN using AICC communication. This means that the content contains settings to determine completion status.

The item contains only content, no instructor-led segments. You want to mark the item complete when all content objects are complete. The event will then be recorded in the learner's Learning History.

If time permits, you may add a second item using a document wrapper that displays a button to the learner, such as "I have read this document." The wrapper lets you set up a content object that launches a document in Adobe PDF format.

Without the wrapper, a simple document would not contain any mechanism for communicating completion status to SATERN. Using the wrapper communicates with SATERN and records a completion status and the time spent in the content.

The item will consist of a Standard Operation Procedure that is required reading. Learners launch the document, and then agree that they have read and understood the document.

The new online items should appear in the **NASA** catalog under the \_\_\_\_\_ subject area. The learners you will manage in this class all have access to the NASA catalog.



### Activity – Prepare a Plan for Online Items

Use the worksheets to plan key fields for the online item you will create in the upcoming lab.

#### ITEM WORKSHEET

Item ID: \_\_\_\_\_

Item Type: \_\_\_\_\_

Item Revision Date/Time: Today at 8 AM

Item Title: \_\_\_\_\_

Approval process: \_\_\_\_\_

Domain: \_\_\_\_\_

Contact Hours: \_\_\_\_\_ Credit Hours: \_\_\_\_\_

Subject Area: \_\_\_\_\_

Content object to add: AICCMODULE1316

Label for content object: Effective Business Meetings Simulation

Online Completion Status: \_\_\_\_\_

Mark item complete when all objects are complete? \_\_\_\_\_

Mark this object COMPLETE when launched? \_\_\_\_\_

Catalog: NASA-CATALOG

Item is Online? \_\_\_\_\_

# Course Introduction

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Through discussion, demonstration, and hands-on computer lab work, this course teaches you the concepts and terminology associated with SATERN's online content management. Learning online provides learners the flexibility to educate themselves in a self-paced, interactive, convenient learning format. Learners access online training through the SATERN learner application and launch asynchronous training at their own convenience.

You will use the step-by-step, hands-on lab exercises to gain basic skills in integrating online content in SATERN.

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## OBJECTIVES

Upon completion of this course, you will be able to:

- Define online content terminology
- Integrate web-based training (WBT) into SATERN
- Create online items
- Describe online training standards, including SCORM and AICC

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## TARGET AUDIENCE

This training is intended for SATERN administrators responsible for:

- ◆ Creating online content
- ◆ Creating and maintaining online items







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## USING THIS GUIDE

This classroom guide is designed to be used in conjunction with an instructor. The guide provides general information that will be elaborated upon by the instructor. For additional information, refer to the online help.

Throughout the guide, you encounter icons that call out various types of information. The following table illustrates how this guide uses icons to indicate different types of comments, activities, labs, etc. that support the text.

Icon	Definition
	<b>Activity:</b> Indicates an activity for you to complete that helps reinforce the information you just learned.
	<b>Note or Tip:</b> Indicates additional information that is related to the information presented. It also provides helpful hints and tips or other guidance that further explains the information it accompanies.
	<b>Lab:</b> Indicates a hands-on computer lab. Follow the step-by-step process outlined to perform specific tasks in the system.
	<b>Warning:</b> Warns against particular actions, or that a particular condition might indicate a problem.

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## ADDITIONAL RESOURCES

There are a number of additional resources that can provide you more information about the SATERN system. These resources include:

- ◆ Online SATERN system help
- ◆ Task-specific job aids

# Lesson 1:

## Overview of Online Learning

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Online learning is a convenient and cost saving approach for delivering training to learners.

Learners can launch online content directly from their Learning Plans. The learning event is automatically recorded when the learner completes the item as defined by the online settings.

This overview discusses background information needed to understand online content terminology and launch methods.

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### OBJECTIVES

Upon completion of this lesson, you will be able to:

- Describe examples of online learning
- Define online content management terminology
- Explain the purpose of SCORM and AICC launch methods
- List steps to set up online content

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### WHAT IS ONLINE LEARNING?

Online learning refers to self-paced training such as a slide show presentation, an audio or video presentation, or a document such as a personnel manual. It is training content that the learner launches from the SATERN application (e.g., HTML pages, Flash movies, Microsoft Word documents, etc.).



SATERN enables learners to launch online content directly from their Learning Plans. The system automatically records learning events when the learner successfully completes an online item. An online item in SATERN can consist of any and/or all of the following components: scheduled items, tests, online course, and surveys.

## CONTENT OBJECTS ARE BUILDING BLOCKS



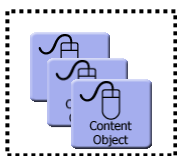
Content objects are the building blocks of an online item. For example, the online item called *Online MS Word Basics* contains three lessons or modules:

Item: ONLINE MWB101 MS Word Basics	
Content	File Type
Creating, Saving, and Editing Word Docs (HTML)	Web Page (HTML)
Simulation of Saving a Word Doc	Web Page (HTML) with an Adobe Flash Movie (SWF)
Exam of Microsoft Word Basics	Web Page with JavaScript (HTML)

These three examples represent three separate content objects in SATERN.

The actual content is not stored in SATERN; it is located on the NASA content server. The content object specifies the storage location as a file path or URL address. The object also contains the launch method of communication with SATERN, using AICC, SCORM, or a web browser.

### Content Package



A content package is a grouping of content objects. It is an easy and convenient way to organize content for multiple item assignments.



An admin from the NSSC first creates the content objects or content package in SATERN. Other SATERN administrators may be responsible for associating content objects with an online item.

This is a necessary step because learners cannot launch a content object until it is associated with an online item.

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## SATERN USES A VARIETY OF LAUNCH METHODS

The admin adding the content object to SATERN selects the appropriate launch method.

If the launch method is **AICC** or **SCORM**, the content can communicate with SATERN. This type of content can track progress and exchange status messages with SATERN. In this way, SATERN can determine when the learner successfully completes the content.

If the content uses the **Browser** launch method, it takes the learner to a web page. There is no way to track progress because HTML does not have a way to communicate status messages to SATERN. Typically, when content objects use the Browser launch method, the admin who set up the content object configures the object to be completed as soon as it is launched. This may be applicable if the site is a suggested resource that does not include mandatory content.

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## PROCESS FOR IMPLEMENTING AN ONLINE COURSE

The first step in the process is for a course developer to create content. They may use an application such as Adobe Captivate, Flash, Composica, Lectora, or Dreamweaver.



For advanced SATERN administrators to create content and set up content objects:

1. Upload/copy content to the SATERN content server (NSSC only).
2. Identify the content type and its location (such as AICC stored on <https://nasa58.gpehosting.com/content/simulation.html>).
3. Set up content objects in SATERN.

Next, an admin creates an item to be associated with one or more content objects:

1. Add an item in SATERN.
2. Associate content object(s) with the item – details are stored in the **Online Settings** tab.
3. Add the item to a catalog and/or assign the item to learners.
4. Test the online item from the SATERN learner side.

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## CONCLUSION

In Lesson 1, we discussed the basics and standards of online content. Online learning is any electronic content that is accessible and tracked from within a learning management system. SATERN supports the integration of SCORM and AICC compliant content. Content objects specify the location and type of content (e.g., AICC, SCORM, etc). Learners access content objects from online and blended learning items in the SATERN learner application. SATERN recommends using the online content process to integrate content within SATERN.

You should now be able to:

- Describe online learning
- Define online content management terminology
- Explain the SCORM and AICC industry standards and their differences
- List the steps of configuring SATERN with online content



## LESSON CHECK

Use what you learned in this lesson to answer the following questions.

1. Describe some examples of online learning.

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2. List the steps of online content creation.

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3. What are the two standards that allow online content to communicate with SATERN?

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4. The content object is identified as AICC when:
  - a) The content communicates to SATERN using AICC standards.
  - b) The content can be accessed via a browser that supports AICC.
  - c) The content was created using the AICC Course Development application.
  
5. True or false:  
An admin can assign content objects directly to a learner's Learning Plan.



## Notes



# Lesson 2: Configuring Items with Online Content

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Administrators assign items, not content objects, to learner Learning Plans and catalogs. Therefore, after content objects are created in the system, an admin must associate them with an item for the learner to be able to launch the content.

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## OBJECTIVES

Upon completion of this lesson, you will be able to:

- Identify available settings for online items
- Create an item with online content
- Test the content on the learner side
- Check online status for content that is in progress
- Deactivate Agency mandatory courses
- Use SATERN as a document repository

## DEFINING ONLINE SETTINGS

Administrators configure online content interaction and assign content objects under the **Online Settings** tab of the item record (Figure 1).

Objects	Type		Remove
<a href="#">Maritime Navigation</a>		<a href="#">Edit</a>	
<a href="#">Inland Rules of the Road (HTML Format)</a>	Group	<a href="#">Edit</a>	<input type="checkbox"/>
<a href="#">References and Lesson Objective</a>	Content	<a href="#">Edit</a>	<input type="checkbox"/>

Figure 1. Online Settings Tab

For example, in order for SATERN to record a completed learning event for the item after a learner successfully completes all online content (and exams if applicable), check the **Mark item complete when all objects are complete** option.

When you are ready to make the content available to learners for launch from the learner side of the application, check the **Item is Online** option. Without this option checked, learners see the item, but the status is *Not Available*.

## ADDING AND ORGANIZING CONTENT OBJECTS

After the admin selects an *Online Completion Status* and clicks **Apply Changes**, SATERN displays a file cabinet icon (). Click

the corresponding **Edit** link to add content. Content objects are added individually or within a content package.

Administrators assign the following to the item (Figure 2):

- ◆ **Folder Objects:** Folders organize complex content by grouping and sequencing assigned content objects.
- ◆ **Content Objects:** Administrators assign individual content objects.
- ◆ **Exam/Survey Objects:** References a PQE exam.



**Note:** Refer to SATERN Online Exams course for additional information.

- ◆ **Content Packages:** A grouping of content objects and/or exams/surveys. The content package is a convenient method to add multiple objects to the item content structure.

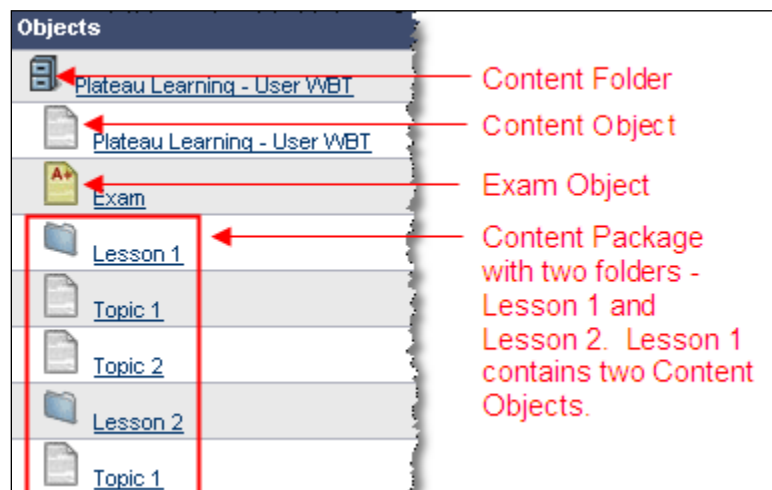


Figure 2. Content Structure



## Lab 1. Create an Online Item

### Step

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1. Navigate to **Learning > Items**.
2. Click the **Add New** link.
3. Select an item type and enter the item ID from your worksheet.
4. Enter a description and title of the item from your worksheet.
5. Select a domain ID for the item, using your worksheet.
6. If necessary, select an approval process and check the **Approval Required** checkbox.  
*If you associate an approval process with an online item, the learner will not be able to launch the content until approval is granted.*
7. Click the **add one or more from list** link to search and select one or more subject areas.
8. Click **Next**, then click **Next** again to skip the settings for segments.
9. Select **Online Completion Status** from the drop-down menu.
10. Check the **Mark item complete when all objects are complete** checkbox.
11. Under Content Type, click the **Object** radio button.
12. Search and select the content object.
13. Enter title from your worksheet.
14. Do not check **Mark this object COMPLETE when launched**.
15. Click **Add**.

16. Repeat steps 12-15 as needed to add more than one content object to a single item.
17. Click **Next**.
18. Click the **add one or more from list** link to search and select one or more catalogs, using your worksheet for guidance.
19. Click **Next**.
20. Review and verify all of your content objects and catalogs are added to the item.
21. Click **Save**.
22. Go to the Online Settings Tab and check **Item is Online** to allow learners to launch the content.



## Lab 2. Test the Online Item

### Step

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1. Log in as a learner and locate the online item.
2. Launch the content and verify that the online item works properly.

## CHECKING ONLINE STATUS

SATERN lists all started online items that are not complete under the **Online Status** tab of the learner record (Figure 3).

User Name: cwinters  
Name: WINTERS, CHASE S

Surveys

SF-182 Requests

Standard Options

Catalog Preview

Preferences

Approval Role

Approvals

Organization Initiatives

Succession Planning

Cpty Profiles

Competencies

Registration

Requests

Online Status

Commerce

Summary

Phone Numbers

Custom Fields

Learning Plan

Learning History

Curricula

Edit the Online Status for the Learner

Sort By: 

Item

☒ Learner has access to the online items

Apply Changes

Reset

Item	Initial Activity Date	Last Activity Date	Details
COURSE HQ-005-09 (Rev 8/21/2009 11:00 AM America/Indianapolis)	3/30/2010 11:14 AM America/Indianapolis	3/30/2010 11:14 AM America/Indianapolis	<a href="#">Object Details</a>
COURSE HQ-CD-TRAVELCARD (Rev 12/22/2008 03:53 PM America/Indianapolis)			<a href="#">Object Details</a>
COURSE SS-ADM0105 (Rev 7/5/2007 01:09 PM America/Indianapolis)	3/30/2010 11:16 AM America/Indianapolis	3/30/2010 11:16 AM America/Indianapolis	<a href="#">Object Details</a>

Apply Changes

Reset

**Figure 3. Online Status Tab: Learner Record**

Use this tab to view the following content object details (Figure 4):

- ◆ Learner accessibility to the content object.
- ◆ Learner completed the content object.
- ◆ The number of times the learner opened the content object.
- ◆ Total time while viewing the content object (if tracked).
- ◆ Score of the content object (if tracked).

Learners
[Search](#) | [Add New](#) | [Help](#)

[> Search](#) > [Search Results](#) > [Edit Online Status](#) > [Object Details](#) > [Edit Content Object](#)

User Name: cwinters  
Learner Name: WINTERS, CHASE S  
Item Type: COURSE  
Item ID: SS-ADM0105  
Revision Date: 7/5/2007 01:09 PM America/Indianapolis  
Revision Number:  
Object Type: Content  
Object Title: Advancing Your Administrative Career

Return to Item Objects

Edit Content Object

Apply Changes Reset

Has Access: ☒  
Finished: ☐  
Needs Review: ☐  
Complete: ☐ as of  
Date:   
Initial Access: 3/30/2010 11:16 AM America/Indianapolis  
Last Access: Last Access: 3/30/2010 11:16 AM America/Indianapolis  
Total Times: 1  
Total Time: N/A  
Score (%):

Apply Changes Reset

**Figure 4. Edit Content Object Details**





### Lab 3. View Learner's Online Status

#### Step

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1. Log in to the admin side of SATERN.
2. Navigate to **Learner Management > Learners**.
3. Access the learner record for the learner that you are testing.
4. Select the **Online Status** tab.
5. Click the **Object Details** link to review the details for the content object:
  - a. Total time
  - b. Score
  - c. Finished
  - d. Completed
  - e. Objective finished
  - f. Objective completed

## MODIFYING AN ITEM WITH ONLINE CONTENT

When changes are made to the online content of an existing item, the admin should follow SATERN business rules. Usually you will go through the item revision process. This ensures that learners who have completed the old content will be assigned the revised version.

In some cases, the admin may just want to change the existing item without creating a new revision. If you make a change to the **Online Settings** tab of an item with online content, the system prompts for decisions about learners currently assigned this item.

You can indicate that the item should be restarted. This forces the learners who were in progress to start the content from the beginning (Figure 5)

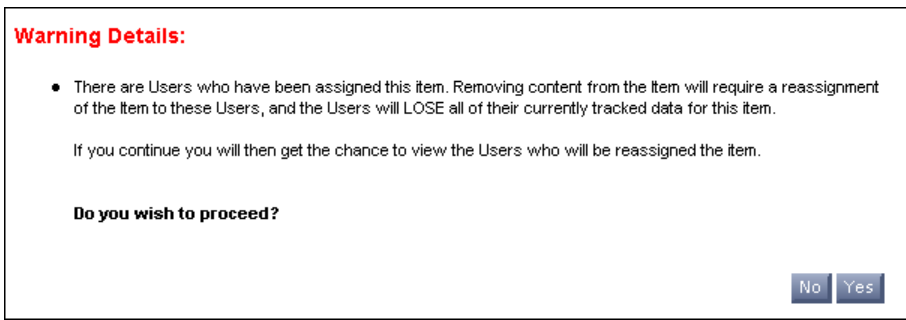


Figure 5. Warning Details

## DEACTIVATION OF AGENCY MANDATORY COURSES

Agency mandatory courses (e.g., *No Fear*) are often automatically assigned to new hires by Centers. If a course is deactivated, learners are unable to access the course. Therefore, the following business rule ensures that Center Administrators receive a communication before the course is deactivated.



When a course owner decides to inactivate an Agency mandatory online course within SATERN, the following process must be followed, unless a deviation is agreed upon by the SATERN Executive Committee (EC) and course owner:

#### ***NASA Business Rules***

1. The course owner will notify the SATERN Online Training Support Services and the NSSC.
2. The course owner will pick a deactivation date that will be no less than three (3) working days from the date of the communication to the parties listed in step four.
3. If the course owner wants a specific communication to be sent out, they will attach that communication to the message sent to the parties listed in step one.
4. The NSSC will send the communication to those within the Centers that they think need to know within 24 hours of receipt of the communication from the course owner. The course owner will notify any of their key stakeholders that they think need to know.

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## **DOCUMENT REPOSITORY**

Some course owners use SATERN as a document repository to place commonly used documentation in a centralized place where the learner can access it. This documentation does not require a certificate and is purely for informational purposes. Setting up these documents like online content allows learners to more easily find and access them.



### ***NASA Business Rule***

Documents must meet the requirements of Section 508 of the Rehabilitation Act. They may be housed on SATERN or on an external Web server. Documents require that a Point of Contact (PoC) be listed in the item record, and this PoC will be responsible for making sure that the document remains up-to-date and accessible. Documents need to be in a format that can be opened on all platforms supported by SATERN using software that is freely available. Section 508-conformance must be verified by the SATERN Online Training Services (<https://www.nssc.nasa.gov/customerservice> > Training > Online Training Services) before posting. Documents must be directly related to an item, scheduled offering, or online content, and use the naming convention listed in the “Data Entry and Data Consistency” section on page 9 of the *Rules and Process Guide for Administrators*. Documents inactive for more than 12 months may be automatically removed from SATERN.

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## **CONCLUSION**

In this lesson, we discussed creating online items. You should now be able to:

- Identify available settings for online items
- Create an item with online content
- Test the content on the learner side
- Check online status for content that is in progress
- Deactivate Agency mandatory courses
- Use SATERN as a document repository

## LESSON CHECK

Use what you learned in this lesson to answer the following questions.

1. What tab of the item would an admin go to add content objects?

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2. True or false:

Admins can check a learner's progress of an online item?

3. True or false:

If an admin associates multiple content objects to a single item, there is no way to force a learner to complete the objects in a sequential order?